

**TECHSPEC® 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens**



12mm FL HRi Series Fixed Focal Length Lens



Stock **#36-766** **1 In Stock**

⊖ 1 ⊕ S\$1,136<sup>00</sup>

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Qty 1+	S\$1,136.00 each
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**SPECIFICATIONS**

**General**

HRi Series

Series:

Type:

## Physical & Mechanical Properties

Fixed Iris Option:

Fixed

Length (mm):

39.20

Maximum Diameter (mm):

33

Outer Diameter (mm):

33

Weight (g):

57

Maximum Rear Protrusion (mm):

1.63

## Optical Properties

Horizontal Field of View @ Max Sensor Format:  
87.7mm - 41.1°

Field of View at Max Sensor Format:  
Horizontal: 87.7mm - 41.1°  
Vertical: 65.1mm - 31.2°  
Diagonal: 111mm - 50.7°

Horizontal Field of View, 2/3" Sensor:  
87.7mm - 41.1°

Horizontal Field of View, 1/1.8" Sensor:  
71.2mm - 33.9°

Horizontal Field of View, 1/2" Sensor:  
63.1mm - 30.2°

Horizontal Field of View, 1/2.5" Sensor:  
57.0mm - 27.4°

Horizontal Field of View, 1/3" Sensor:  
47.0mm - 22.8°

Horizontal Field of View, 1/4" Sensor:  
35.2mm - 17.1°

Maximum Image Circle (mm):  
11.00

Numerical Aperture NA, Object Side:  
0.0063

Number of Elements (Groups):  
10 (6)

Focal Length FL (mm):  
12.00

Working Distance (mm):  
100 - ∞

Aperture (f/#):  
f/8

Coating:  
425 - 675nm BBAR

Coating Specification:  
425 - 675nm BBAR

Entrance Pupil Position (mm):  
17.46

Object Space Principal Plane (mm):  
26.28

Image Space Principal Plane (mm):  
2.98

Maximum Distortion (%):  
-3.15

Exit Pupil Position (mm):  
-30.39

Optimized Working Distance (mm):  
150 - 500

Lens Wavelength Range:  
VIS

## Sensor

Maximum Sensor Format:  
2/3"

Pixel Size (μm):  
1.85

## Threading & Mounting

Filter Thread:  
M30.5 x 0.50 (Female)

## Environmental & Durability Factors

**Storage Temperature (°C):**  
-20 to +60

**Type of Ruggedization:**  
Industrial (Fixed Aperture with Simplified Mechanics)

## Regulatory Compliance

**Certificate of Conformance:**  
[View](#)

## PRODUCT DETAILS

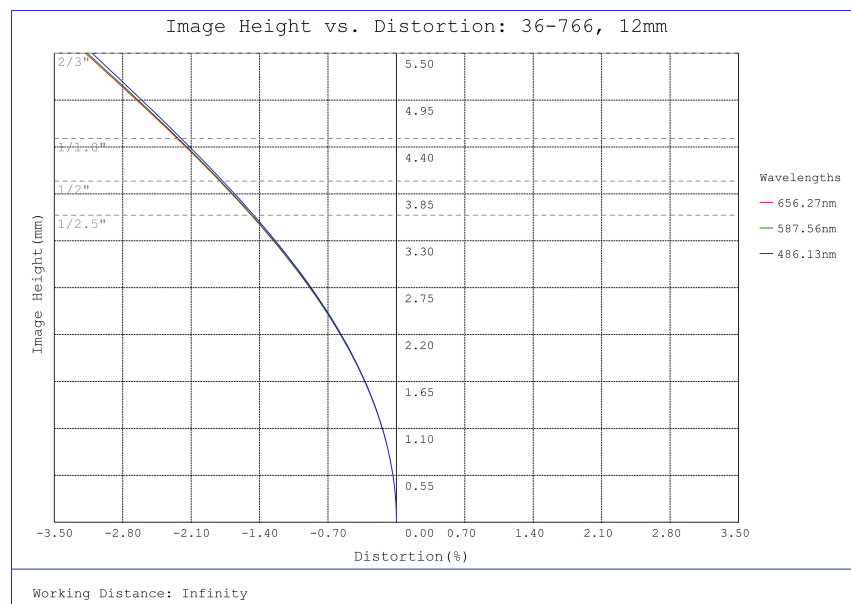
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- **Ruggedized (HRr) Designs** Also Available

TECHSPEC® HRi Series Fixed Focal Length Lenses are a streamlined version of our HR Series Lenses. There are multiple options available for each focal length to accommodate a variety of optimized working distance ranges. Designed for high volume imaging applications, HPI series lenses feature simplified focus mechanics and a fixed aperture. TECHSPEC HRi Series Fixed Focal Length Lenses are available in a variety of f/# options, making them ideal for applications that require reduced size, cost, and lockable focus imaging solutions. Call for OEM Quantity Pricing.

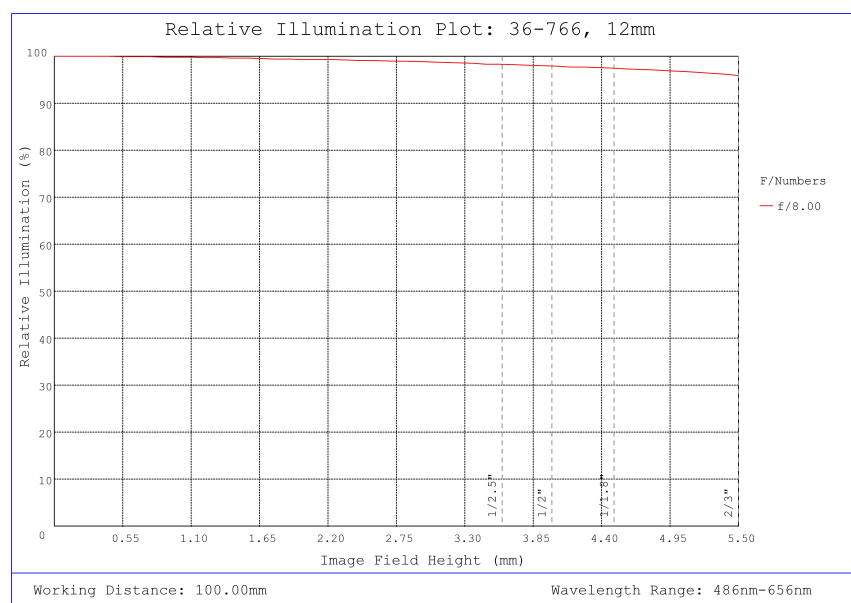
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

- **HR Series:** Features locking cam focus and iris adjustment. This is the most adjustable version of these optical designs and is the typical high quality machine vision lens.
- **HRi Series:** Simplified mechanics featuring fixed apertures with compact housing. **Industrial Ruggedization** for reduced size, cost, and locked focus.
- **HRr Series:** All optics glued in place and a locking C-clamp focus ring. **Stabilized Ruggedization** for reduced pixel shift and improved focus stability.

## TECHNICAL INFORMATION



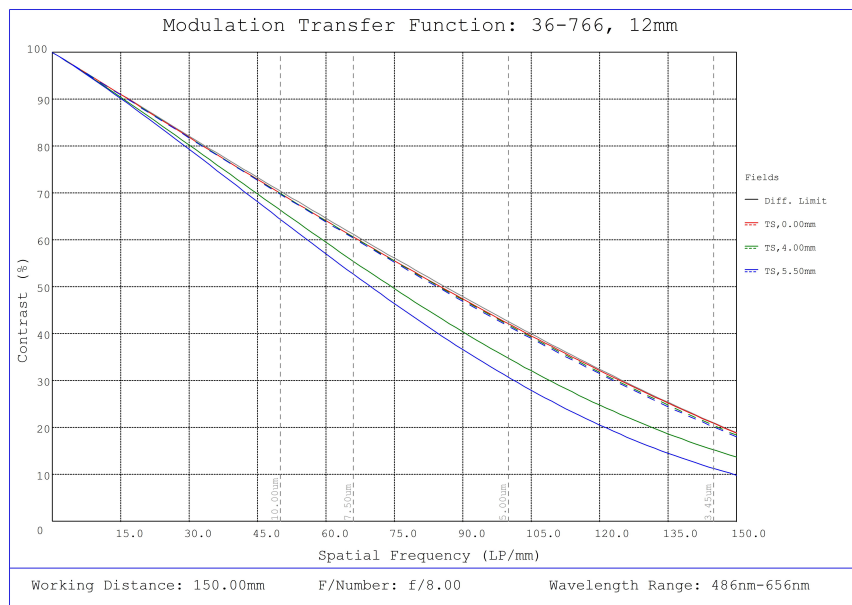
#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



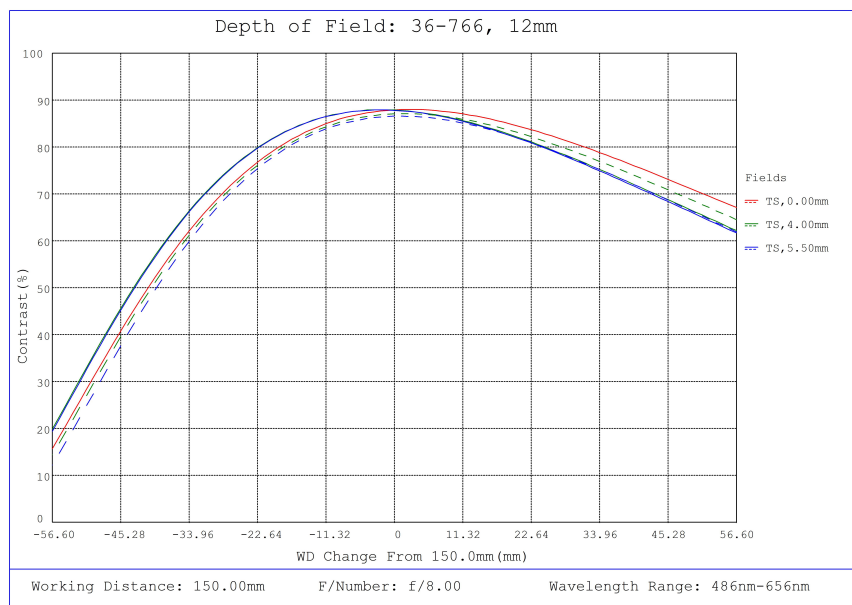
#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



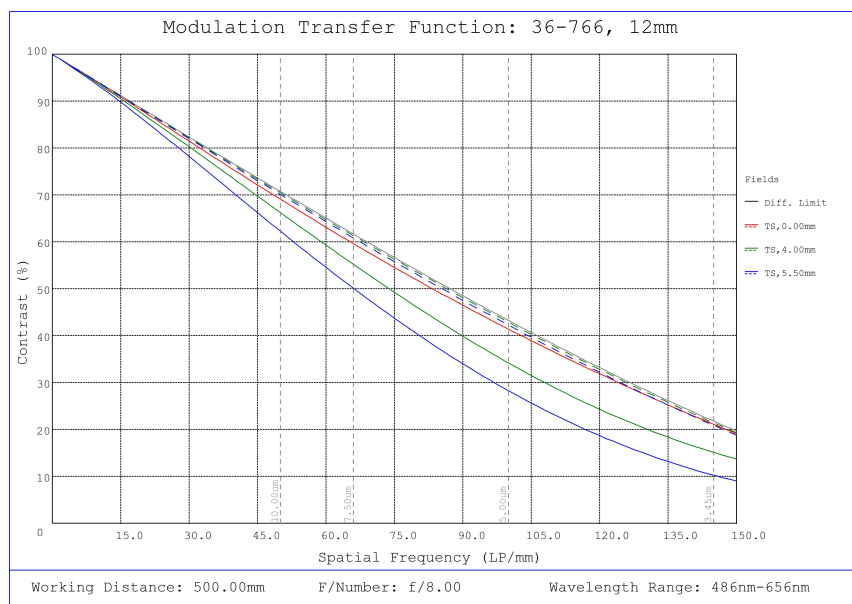
#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



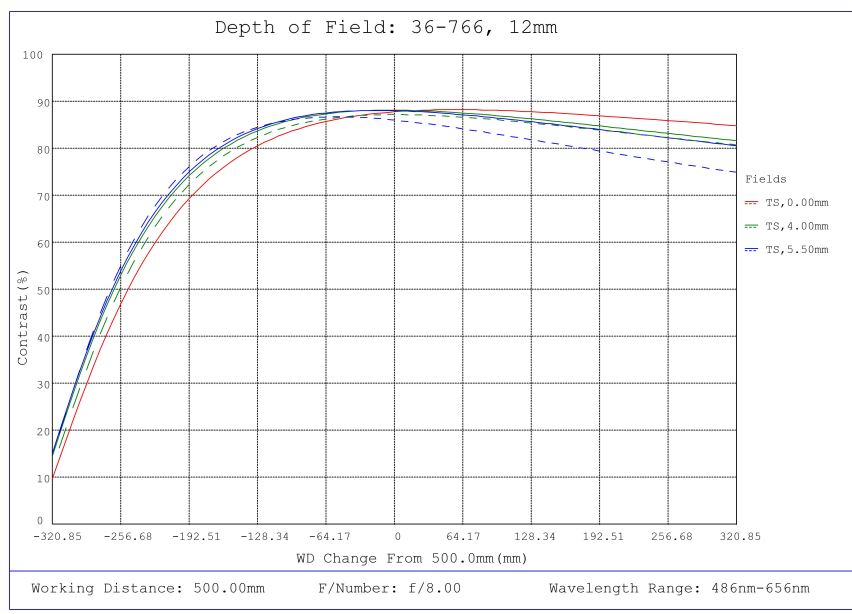
#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f8



#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 150mm Working Distance, f8



#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f8



#36-766, 12mm f/8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f8

## COMPATIBLE CAMERAS